



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/071,046	05/04/1998	JURGEN REINOLD	MCG00215	5093

7590

01/02/2002

MAURICE J JONES
MOTOROLA INC
INTELLECTUAL PROPERTY DEPT SUITE R3108
P O BOX 10219
SCOTTSDALE, AZ 852710219

EXAMINER

BUI, KIEU OANH T

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 01/02/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/071,046

Applicant(s)

REINOLD ET AL.

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-5, 9-13, 16-18, and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al (U.S. Patent No. 5,729,549) in view of Ozkan et al (U.S. Patent No. 5,946,045).

Regarding claim 1, Kostreski et al (or "Kostreski" hereinafter) disclose a system for distributing audio content of a digital audio signal to an analog wireline device, i.e., digital audio sources can be broadcasted to users in audio/video signals for standard (conventional or analog) output device 75 (Fig. 4 and col. 8/lines 10-30), comprising: an audio input interface receiving the digital audio signal and identifying an audio bitstream, i.e., the demultiplexer circuitry recognizes the audio input stream via the transport interface module and identifying that bit stream (Fig. 8 and col. 21/lines 8-32); an audio decoding unit connected to the audio input interface and decoding the audio bitstream, i.e., an audio decoder (Fig. 8/item 131 and col. 21/lines 21-26); an audio digital-to-analog converter connected to the audio decoding unit and converting the audio bitstream to an analog audio signal (DAC 135L & 135R, mistakenly labeled 134L & 134R in Fig. 8, and col 22/lines 19-35); and an audio output interface connected to the

audio digital-to-analog converter and distributing the analog audio signal to the analog wireline device, i.e., either audio analog left and right outputs or RF modulator are used to distribute analog audio signals to analog wireline device, for example, to a standard or conventional television set, by a pair of stereo cable or a coaxial cable, respectively (Fig. 8/Audio Left, Audio Right or RF out, and col. 22/lines 19-59).

Kostreski suggests the step of “wherein the audio bit stream comprises audio data based on a plurality of encoding methods” by revealing the use of MPEG-1 or DIGICIPHER AND MPEG-2 encoding technique (Kostreski, col. 12/lines 9-17). However, since the Applicants previously argued on this issue as discussed in earlier arguments, the Examiner would like to disclose the teachings of Ozkan et al. (or “Ozkan” hereinafter). In the same environment of receiving and broadcasting video signals to a plurality of viewers in the field of digital signal processing, Ozkan obviously discloses a technique and an apparatus for receiving and transmitting signals of variable coding formats according to different standards either MPEG-compatible or non-MPEG compatible (see Ozkan, col. 1/lines 35-67; col. 2/lines 9-40; and further in details in col. 3/lines 20-52), for instance, Ozkan introduces the use of different decoding techniques or methods of formats such as input signal coding type including differential and non-differential codes, trellis or non-trellis codes, and input signal modulation format 64 or 256 element symbol constellations (col. 4/lines 6-24) and further details in Figs. 1 & 5 for the principle of the apparatus for demodulating and decoding signals of variable broadcast encoding format and its flow chart for the mentioned process (col. 4/line 25 to col. 5/line 53 & col. 10/line 47 to col. 11/line 31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further clarify Kostreski’s technique with the use of different encoding techniques as disclosed by Ozkan in order to obtain an enhanced system that offers the convenience in handling different formats from a plurality of

sources by using a plurality of encoding methods at the video/audio interface or receiving apparatus as preferred.

As for claims 2 and 10, Kostreski further discloses to include “an audio digital decryption unit connected to the audio input interface and decrypting the audio bitstream” and “a video digital decryption unit connected to the video input interface and decrypting the video bitstream”, i.e., decryption circuitry is available for digital audio/video inputs (col. 20/lines 39-67).

Regarding claims 3 and 11, Kostreski does disclose “an audio analog decryption unit connected to the audio digital-to-analog converter and decrypting the analog audio signal” and “a video analog decryption unit connected to the video digital to analog converter and decrypting the analog video signal” as claimed; however, it is inherently suggested and included by Kostreski as Kostreski shows the decryption unit combined in a single module, not separately into two units as claimed, for example, a digital decryption unit and an analog decryption unit. However, a same result is obtained by decrypting signals from digital forms to analog forms for video and audio signals as taught by Kostreski (col. 23/line 53-col. 24/line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clarify Kostreski’s decryption unit for audio/video signals with two separate decryption units, i.e., a digital decryption unit and an analog decryption unit, in handling encrypted digital signals from other sources and translating them to analog signals (for analog devices) with a better view in visualizing how the decryption unit works as desired.

With respect to claims 4-5, 12-13 and 18, Kostreski also shows “wherein the audio and video (for claim 12) output interface distributes the analog audio signal to multiple devices”, i.e., to multiple subscribers and portable PCS (col. 5/line 60-col. 6/line 7); and “wherein the audio and video (for claim 13) input interface receives the digital audio signal from a network”, i.e., within a public wireless packet data network (col. 5/lines 64-67).

Regarding claim 9, Kostreski discloses a system for distributing video content of a digital video signal to an analog wireline device, i.e., digital video sources can be broadcasted to users in audio/video signals for standard (conventional or analog) output device 75 (Fig. 4 and col. 8/lines 10-30), comprising: a video input interface receiving the digital video signal and identifying a video bitstream, i.e., the demultiplexer circuitry 127 recognizes the video input stream via the transport interface module and identifying that bit stream (Fig. 8 and col. 21/lines 8-32); a video decoding unit connected to the video input interface and decoding the video bitstream, i.e., a video decoder (Fig. 8/item 128 and col. 21/lines 21-26); a video digital-to-analog converter connected to the video decoding unit and converting the video bitstream to an analog video signal, i.e., NTSC encoder (Fig. 8/item 137 and col. 22/lines 36-59); and a video output interface connected to the video digital-to-analog converter and distributing the analog video signal to the analog wireline device, i.e., to Baseband video or RF out via RF modulator depending on the type of television set (Fig. 8 and col. 22/lines 19-59).

Kostreski shows the step of “wherein the audio bit stream comprises audio data based on a plurality of encoding methods” by revealing the use of MPEG-1 or DIGICIPHER AND MPEG-2 encoding technique (Kostreski, col. 12/lines 9-17). However, since the Applicants previously argues on this issue as discussed in earlier arguments, the Examiner would like to disclose the teachings of Ozkan et al. (or “Ozkan” hereinafter). In the same environment of receiving and broadcasting video signals to a plurality of viewers in the field of digital signal processing, Ozkan obviously discloses a technique and an apparatus for receiving and transmitting signals of variable coding formats according to different standards either MPEG-compatible or non-MPEG compatible (see Ozkan, col. 1/lines 35-67; col. 2/lines 9-40; and further in details in col. 3/lines 20-52), for example, Ozkan introduces the use of different decoding techniques or methods of formats such as input signal coding type including differential and non-differential codes, trellis or non-trellis codes, and input signal modulation

format 64 or 256 element symbol constellations (col. 4/lines 6-24) and further details in Figs. 1 & 5 for the principle of the apparatus for demodulating and decoding signals of variable broadcast encoding format and its flow chart for the mentioned process (col. 4/line 25 to col. 5/line 53 & col. 10/line 47 to col. 11/line 31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clarify Kostreski's technique with the use of different encoding techniques as disclosed by Ozkan in order to obtain an enhanced system that offers the convenience in handling different formats from a plurality of sources by using a plurality of encoding methods at the video/audio interface or receiving apparatus as preferred.

Regarding claim 16, this claim, which is a combination of claims 1 and 9, is rejected for the reasons given in the scope of claims 1 and 9 as already disclosed above.

As for claim 17, Kostreski discloses "a splitter receiving a digital input signal and splitting the digital input signal into the digital audio signal and the digital video signal", i.e., the system MUX acts as a splitter therein in providing separate digital video and digital audio signals (Fig. 8/item 127).

As for claims 21-30, these method claims for applying the system as described above are rejected for the reasons given in the scope of system claims 1-5, 9-13, and 17 as already disclosed above.

4. Claims 6, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al (U.S. Patent No. 5,729,549) in view of Ozkan et al (U.S. Patent No. 5,946,045) and Bertram (U.S. Patent No. 6,011,546).

Regarding claims 6, 14 and 19, Kostreski teaches portable PCS in the system (Fig. 4), but Kostreski and Ozkan do not show "wherein the audio input interface receives the digital audio signal from a local storage device" and "wherein the video input interface receives the digital video signal from a local storage device"; however, the technique to utilize a local digital source

such as from a CD ROM disk or a hard drive is taught by Bertram by using an audio DAC 59 to convert digital audio signals to analog audio signals from audio source CD Drive 54 (Figs. 3-5 and col. 9/line 49-col. 10/line 39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kostreski and Ozkan's teachings as disclosed with an additional feature such as "obtaining digital audio signal from a local storage device" as suggested by Betram in expanding the distributing source not only from a network but also from a local storage device as desired.

5. Claims 7-8, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kostreski et al (U.S. Patent No. 5,729,549) in view of Ozkan et al. (U.S. Patent 5,946,045) and Schulhof et al (U.S. Patent No. 5,841,979).

Regarding claims 7-8, 15 and 20, the combination of Kostrestri and Ozkan do not reveal "wherein the audio input interface receives the digital audio signal produced by a text-to-speech application" and "wherein the audio input interface receives the digital audio signal produced by a digital musical instrument" and "wherein the video input interface receives the digital video signal produced by a digital video camera" as claimed; however, Schulhof teaches the same technique for users in his enhanced delivery of audio data to receive "the digital audio signal produced by a text-to-speech application" (Schulhof, Figs. 1-2, and col. 6/lines 47-65) and "the digital audio signal produced by a digital musical instrument", i.e., a Sony portable digital recordable mini-CD (Schulhof, col. 2/line 65-col. 3/line 38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined Kostreski and Ozkan's system with Schulhof's disclosed technique in using a text-to-speech application and the concept of utilizing digital audio signal from digital musical instruments, such as a Sony portable digital recordable mini-CD or a digital camera, as some of vast available resources on the market for the described system to use as preferred.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
December 19, 2001


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600